

REMARKS

Claims 1-5 and 8-13 are pending in the application. Applicants have amended claims 1, 11, and 12 and added claims 14-17, leaving claims 1-5 and 8-17 for consideration upon entry of the present Amendment. The specification has been amended as described in detail below. No new matter has been introduced by these amendments.

The paragraph bridging pages 5 and 6 has been amended to correct the spelling of "quaternary".

The third paragraph on page 7 of the specification as filed, which had been deleted in Applicants' 15 Jun 2001 amendment, has been reinserted.

The paragraph on page 8, lines 12-24 has been amended to substitute -- as -- for "a" in two places and to substitute -- non-synchronous -- for "synchronous" in line 21, thereby making the description of "isolation ratio" consistent with the description of its measurement in the paragraph bridging pages 35 and 36 of the specification as filed.

The paragraph bridging pages 10-11 has been amended to correct misspellings of "microcrystalline" and "paraffin".

The paragraph on page 15, lines 9-13 has been amended to correct the misspelling of "valeric".

The paragraph bridging pages 20 and 21 has been amended to correct misspellings of "azoisobutyronitrile" and "can".

Table 1 on pages 28-31 has been amended to delete changes objected to as new matter in the 8 April 2002 Office Action.

The paragraph bridging pages 33 and 34 has been amended to substitute a period for the comma occurring at page 33, line 22.

Support for new Claims 14-17 may be found in the paragraph bridging pages 5 and 6 of the specification as filed.

Objections to the Specification

In paragraph 2 (pages 2-5) of the 8 April 2002 Office Action, the Examiner objected to the amendment filed on June 18, 2001. The Examiner asserts that certain amendments in Table 1 contain new matter. Applicants have amended Table 1 to reverse the effects of June 18, 2001 amendments objected to as containing new matter. Applicants respectfully request that this objection be withdrawn.

Interpretation of "Element"

Paragraph 3 (page 5) of the 8 April 2002 Office Action is reproduced below:

Applicants in Paper No. 5 did not refute the examiner's interpretation that the "element" having an isolation ratio of not more than 10% by number recited in the instant claims refers to a component that is a part of the toner particles (i.e., the colored resin particles). In other words, the "element" is a component used to form the toner particles, and is not an external additive added to the already formed toner particles, such as a fluidity agent.

Applicants have amended Claim 1 to eliminate any confusion about the meaning of the isolation ratio:

1. (Twice Amended/Clean) A toner for developing an electrostatic image, comprising:
 - a resin binder; and
 - not less than 0.1% by weight of an element selected from the group consisting of copper, chromium, iron, zinc, and molybdenum;
 - wherein the toner has an isolation ratio of the element of not more than 10% by number, where the isolation ratio of the element is determined by particle emission analysis and defined as 100 times the number of particles exhibiting emission from the element but not exhibiting emission from carbon divided by the sum of the number of particles exhibiting emission from the element but not exhibiting emission from carbon and the number of particles exhibiting emission from the element and exhibiting emission from carbon.

Support for the definition of "isolation ratio" incorporated into Claim 1 may be found at page 35, line 15 to page 36, line 6 of the specification as filed. This definition makes clear that although the element is contained in the toner, it is not necessarily contained within the colored resin particles. For example, the element may be contained in particles other than the colored resin particles (see page 7, lines 11-15 of the specification as filed). In summary, Applicants agree with the Examiner's interpretation that "the element is a part of the toner

particles" but disagree with the interpretation that the element is exclusively found within the colored resin particles of the toner.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 11 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention. The Examiner states out that claim 11 is indefinite because it is dependent on now canceled claims 6 and 7 and because it is not clear to what toner "the toner" in Claim 11 refers. Applicants have amended Claim 11 to depend from Claim 1, thereby removing any ambiguity about "the toner". Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 12 and 13 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 12 has been amended to recite that "the isolation ratio of the element is not more than 2.5% by number". Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 102(b) and/or 103(a)

Claims 1-4 and 8-12 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,376,493 to Kobayashi, as evidenced by ACS File Reg. No. 147-14-8.

Claims 1-4 and 8-12 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,856,055 to Ugai et al.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,856,055 to Ugai et al.

Claims 1-3 and 8-12 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,645,967 to Sato et al.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato combined with U.S. Patent No. 5,037,715 to Hagiwara et al.

Applicants respectfully traverse these rejections.

U.S. Patent No. 5,376,493 to Kobayashi (hereinafter "Kobayashi") generally describes a toner producing process comprising the steps of mixing a solvent, a first binding resin soluble therein, and particles of a coloring agent insoluble therein, with each other; dispersing the particles of the coloring agent in the binding resin while applying a shearing force thereto to obtain a dispersed substance; removing the solvent from the dispersed substance to obtain a coloring agent-binding resin composition in which the particles of the coloring agent are dispersed; mixing the coloring agent-binding resin composition with a second binding resin and a charge controlling agent; melt-kneading the mixture to obtain a kneaded substance; and forming toner from the kneaded substance (Abstract). The Examiner has called attention to Kobayashi Example 3 at column 12. (8 April 2002 Office Action, page 8, paragraph no. 11.)

U.S. Patent No. 5,856,055 to Ugai et al. (hereinafter "Ugai") generally describes an electrophotographic black toner containing carbon black in a good dispersion state as well as a combined charge control agent system including a specific azo iron metal compound and an oxycarboxylic acid metal compound. The toner is produced through polymerization in an aqueous system. (Abstract.) The examiner has called attention to Ugai's toners Q and R in Tables 2 and 3 at column 26 (8 April 2002 Office Action, page 11, paragraph no. 12).

U.S. Patent No. 5,645,967 to Sato et al. (hereinafter "Sato") generally describes a charge controlling agent composition for use in an electrophotographic toner. The charge controlling agent composition is obtained either by adding carbon during the preparation of the charge controlling agent or by mixing the charge controlling agent with carbon in the presence of a solvent. (Abstract.) The Examiner has called attention to Sato's Composition 30 in Table 4 at column 19, corresponding to Example No. 23 in Table 8 at columns 23-24 (8 April 2002 Office Action, page 14, paragraph no. 14).

U.S. Patent No. 5,037,715 to Hagiwara et al. (hereinafter "Hagiwara") generally describes a resin for use in electrophotographic toner, comprising a urethane-modified polyester resin (D) having a glass transition temperature ranging from 40° to 75° C, which is obtained by reacting a resin mixture composed of a polyester resin (A) having a number-

averaging molecular weight of 1,000 to 15,000 and a hydroxyl value of 10 to 100 and a polyester resin (B) having a number-average molecular weight ranging from 1,000 to 5,000 and a sum of acid value and hydroxyl value of less than 10, in a weight ratio of (A)/(B) ranging from 20:80 to 60:40, with 0.3 to 0.99 molar equivalent of an isocyanate compound (C) per one molar equivalent of hydroxyl group of the polyester resin (A). (Abstract.) The Examiner has pointed to Hagiwara's Preparation Examples 3-7 (Table 3, columns 9-10) for their molecular weight properties (8 April 2002 Office Action, page 16, paragraph no. 15).

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 SPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the * * * claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A 1970).

Applicants respectfully assert that the individual references and reference combinations detailed above cannot anticipate or render obvious their Claim 1 because they does not expressly or inherently teach the Claim 1 limitation that "the toner has an isolation ratio of the element not more than 10% by number". The Examiner has acknowledged that the isolation ratio limitation is not expressly taught in any of the cited references but asserted that it is inherently satisfied based on the compositions and the imaging advantages taught by the references.

In their 15 June 2001 response, Applicants submitted a Rule 132 declaration from Mr. Ken Ohmura (hereinafter "the Ohmura declaration") showing that toners prepared according to Kobayashi Example 3 ("Sample K"), Ugai Samples Q and R ("Samples Q and R"), and Sato Example No. 23 ("Sample S") exhibited isolation ratios that did not meet Applicants' Claim 1 limit of "not more than 10%". The declaration further demonstrated that the reference toners were inferior to inventive toners in their charging properties and fog level after 10,000 copies.

In the 8 April 2002 Office Action, the Examiner has stated that “[t]he Rule 132 declaration is insufficient to show that the prior art toners do not have an isolation ratio as recited in the instant claims” (8 April 2002 Office Action, page 19, lines 1-3). The Examiner further stated that “Applicants have not provided any explanation as to why toners K, Q, R, and S exhibit a chargeability after 10,000 copies that is much less than the chargeability after 50,000 copies reported in the prior art” (8 April 2002 Office Action, page 20, lines 2-5).

Submitted herewith is a Rule 132 declaration executed by Mr. Hiroshi Yamazaki (hereinafter “the Yamazaki declaration”), providing an explanation for the inferiority of the charging properties and fog levels reported in the Ohmura declaration compared with those reported in the original references. The Yamazaki declaration notes that image formation tests conducted for the Ohmura declaration were performed as described on pages 36 to 37 of Applicants’ specification to facilitate comparison to Applicants’ inventive toners (Yamazaki declaration, page 3, paragraph 9). In particular, the image formation tests of the Ohmura declaration employed a Konica KL2010 printer utilizing a non-contact developing method (Yamazaki declaration, page 4, paragraph 9; Application, page 24, line 13 through page 26, line 17). The inferiority of the charging properties and fog levels reported in the Ohmura declaration compared to those reported in the references is attributable to the different printer types and methods employed in the respective tests (Yamazaki declaration, page 4, paragraph 11). Applicants respectfully assert that this difference in imaging test results does not detract from the Ohmura declaration’s showing that the reference toners do not meet Applicants’ Claim 1 isolation ratio limitation.

The Yamazaki declaration also provides an explanation for why the reference toners do not meet Applicants’ isolation ratio limitation. Following the teaching of the respective references, Samples K and S were prepared using a jet mill, and Samples Q and R were prepared by suspension polymerization. Applicants’ specification teaches that the isolation ratio of Toner A, prepared from pre-formed binder resin, is influenced by the conditions of crushing and classification. In particular, the desirable low isolation ratios are favored by mechanical crushing under mild conditions, but disfavored by “air-current crushing method[s]” such as those used in a jet mill grinder. (Application, page 11, line 24 to page 12, line 2.) The high isolation ratios of Samples K and S may therefore be attributed to their preparation using a jet mill in accordance with the teachings of the respective references.

Applicants' specification further teaches that the isolation ratio of Toner B, prepared by a method that includes polymerization of monomer(s) to form the resin binder, is influenced by the addition order and addition time of raw materials, the polymerization conditions, and the washing conditions of the polymerization products. In order to achieve the desirable low isolation ratios, emulsion polymerization is favored over suspension and solution polymerizations. (Application, page 19, line 11 to page 21, line 2). The high isolation ratios of Samples Q and R may therefore be attributed to their preparation using suspension polymerization.

By the Ohmura and Yamazaki declarations, Applicants have demonstrated that the reference toners do not meet the Claim 1 isolation ratio limitation, and they have provided an explanation for the difference between the imaging test results of the Ohmura declaration and those of the references themselves. Applicants have therefore rebutted the *prima facie* case that the prior art toners are the same or substantially the same as those claimed by Applicants.

In summary, Applicants maintain their assertion that the cited references cannot anticipate or render obvious Applicants' Claim 1 toner because the references do not expressly or inherently teach the Claim 1 limitation that "the toner has an isolation ratio of the element not more than 10% by number". Given that Claims 2-4 and 8-13 include all the limitations of Claim 1, they, too, are patentable over the cited references.

Claim Rejections Under 35 U.S.C. § 102(e)/103(a)

Claims 1-3, 5, and 8-13 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,238,836 B1 to Nakamura et al. (hereinafter "Nakamura"). Applicants respectfully traverse this rejection.

Nakamura generally describes an electrostatic image developer, which is a toner composition containing colored resin particles comprising at least a binder resin, a colorant, and a charge control agent, wherein the binder resin is prepared from (1) an epoxy compound with a valence of 5 or more, (2) a polybasic acid compound having a valence of 2 or more selected from the group consisting of polybasic acids and/or acid anhydrides and/or lower alkyl esters thereof, and (3) a polyvalent alcohol having a valence of 2 or more (Abstract). The Examiner has called attention to Embodiment 6 at column 25, lines 3-25 and Table 3.

The Examiner acknowledges that Nakamura does not disclose Applicants' Claim 1 isolation ratio (8 April 2002 Office Action, page 21, lines 11-13) but presumes that the isolation ratio is satisfied based on the Embodiment 6 composition and properties (8 April 2002 Office Action, page 21, line 33 to page 22, line 4). The Yamazaki declaration shows that Sample N, prepared according to Nakamura Embodiment 6, exhibits an isolation ratio of 14.4% and therefore fails to meet Applicants' Claim 1 limitations (Yamazaki Declaration, page 5, Table). This high isolation ratio may be attributed to the method of preparation, which involves vigorous mixing the pre-formed resin of synthesis example 1 with the molybdenum-containing charge control agent using a Henschell [sic] mixer and a two-axle kneader (Nakamura, column 24, lines 32-35 and column 25, lines 3-25). The Yamazaki declaration also shows that Sample N is inferior to Applicants' inventive examples in chargeability and fog formation after 10,000 copies. As discussed above for other references, any difference between the image performance of Sample N in the Yamazaki declaration and Embodiment 6 in Nakamura may be attributed to the different printer types and methods employed in the respective tests. These differences do not detract from Applicants' showing that Sample N does not satisfy Applicants' Claim 1 isolation ratio limitation.

As Nakamura does not teach or suggest Applicants' Claim 1 isolation ratio limitation, it cannot anticipate Claim 1, nor can it support a prima facie case of obviousness against Claim 1. Given that Claims 2, 3, 5, and 8-13 include all the limitations of Claim 1, they, too, are patentable over Nakamura. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of Claims 1-3, 5, and 8-13 over Nakamura.

Attached hereto is a marked-up version of the changes made to the application. The attached page is captioned "Version with Markings to Show Changes Made".

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

OSHIBA et al.

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Attached #12

Version with Markings to Show Changes Made**IN THE SPECIFICATION:**

A marked-up version of the paragraph bridging pages 5 and 6 follows:

"The specified element can be contained in the toner, for example, in a form of pigment, charge controlling agent or metal oxide, although may be contained in a form of elemental metal. Concretely, the specified element can be contained by adding into a component of toner, for example, a pigment such as copper phthalocyanine pigment, a magnetic powder such as magnetite and ferrite, and a charge controlling agent such as an chromium azo complex, a chromium salicylic acid complex, a zinc salicylic acid complex, a zinc salicylic acid complex and a molybdenum [quaternary] quaternary ammonium complex."

A marked-up version of the paragraph on page 8, lines 12-14 follows:

"The number of the particle containing the specified element which synchronously emits light caused by the specified element with light caused by carbon atom, hereinafter referred to [a] as synchronous light emission particle, and the number of the particle containing the specified element which emits light caused by the specified element without synchronous [with] light emission caused by carbon atom, herein after referred to [a] as non-synchronous light emission particle, are counted. The ratio of the number of [synchronous] non-synchronous light emission particle to the sum of the number of the synchronous and non-synchronous light emission particles is defined as the isolation ratio of the specified element in percent by number."

A marked-up version of the paragraph bridging pages 10-11 follows:

"Practical examples of the releasing agent include polyolefin compounds such as low molecular weight polypropylene having number average molecular weight of 1,500 to 9,000, low molecular weight polyethylene, ethylene-propylene copolymer, [microcrystalline] microcrystalline wax, Carnauba wax, Sazole wax, [parafin] paraffin wax, amide wax etc."

A marked-up version of the paragraph on page 15, lines 9-13 follows:

"A radical polymerization initiator includes a water-soluble initiator such as peroxide salt compound (for example, potassium peroxide, ammonium peroxide), salt of azobisaminodipropene acetic acid, azobiscyano valerate, azobiscyano [valeic] valeric acid, and hydrogen peroxide."

A marked-up version of the paragraph bridging pages 20 and 21 follows:

"As the polymerization initiator in the suspension polymerization method and the solution polymerization method, an oil-soluble radical polymerization initiator such as [azoisobutylonitrile] azoisobutyronitrile and lauryl peroxide, is usable. In the invention, it is preferred that the toner is prepared by the emulsion polymerization method, even though various methods [cam] can be utilized as above-mentioned. The reason of such the fact is not confirmed but the emulsion polymerization method is preferably as the preparation method of the polymerized toner in the invention since an extreme small amount of isolated substance can be formed because the compound containing the specified element is coagulated with the resin particle in the aqueous medium to form a toner in this method."

A marked-up version of Table 1 on pages 28-31 of the specification follows:

Table 1

			Example			
			1	2	3	4
Receipt of raw material composition of colored particle (Parts by weight)	Binder resin	Styrene-acrylate resin 1	100	100	100	100
		Styrene-acrylate resin 2				
		Polyester resin				
	Colorant	Magnetite	105	105	105	105
		Copper phthalocyanine type cyan pigment				
		Quinacridone magenta type pigment				
		Benzidine yellow type pigment				
	Mold releasing agent	Carbon black				
		Low molecular weight polypropylene	3.5	3.5	4	3.5
		Low molecular weight polyethylene				
	Charge controlling agent	Fatty acid amide wax				
		Iron-azo complex	1	1	1	0.7
		Chromium salicylic acid complex				
		Zinc salicylic acid complex				
	External additive (added amount to colored particle in parts by weight)	Molybdenum quaternary ammonium complex				
		Silica	1	1	1	1
		Positively chargeable silica				
		Titanium oxide				

			Example				
			5	6	7	8	
Receipt of raw material composition of colored particle (Parts by weight)	Binder resin	Styrene-acrylate resin 1					
		Styrene-acrylate resin 2					
		Polyester resin	100	100	100	100	
	Colorant	Magnetite					
		Copper phthalocyanine type cyan pigment	3	3	3	3	
		Quinacridone magenta type pigment					
		Benzidine yellow type pigment					
		Carbon black					
	Mold releasing agent	Low molecular weight polypropylene			2	2	
		Low molecular weight polyethylene	3	3			
		Fatty acid amide wax			[2]	[2]	
	Charge controlling agent	Iron-azo complex					
		Chromium salicylic acid complex	[2.5]				
		Zinc salicylic acid complex	2.5				
		Molybdenum quaternary ammonium complex					
External additive (added amount to colored particle in parts by weight)		Silica	2.5	2.5	2.5	2.5	
		Positively chargeable silica					
		Titanium oxide	0.5	0.5	0.5	0.5	

		Example				
		9	10	11	12	13
Receipt of raw material composi tion of colored particle (Parts by weight)	Binder resin	Styrene-acrylate resin 1				
		Styrene-acrylate resin 2	100			
		Polyester resin		100	100	100
	Colorant	Magnetite				
		Copper phthalocyanine type cyan pigment	[3]			
		Quinacridone magenta type pigment		4	4	
		Benzidine yellow type pigment			4	4
		Carbon black				
	Mold releasing agent	Low molecular weight polypropylene	4	4	4	4
		Low molecular weight polyethylene				
		Fatty acid amide wax	[5]			
	Charge controll- ing agent	Iron-azo complex				2 2
		Chromium salicylic acid complex	2	2	[2]	[2]
		Zinc salicylic acid complex	[2]	[2]		
		Molybdenum quaternary ammonium complex				
External additive (Added amount to colored particle in parts by weight)	Silica	2.5	2.5	2.5	2.5	2.5
	Positively chargeable silica					
	Titanium oxide	0.5	0.5	0.5	0.5	0.5

			Example			Comparative example	
			14	15	16	1	2
Receipt of raw material composition of colored particle (Parts by weight)	Binder resin	Styrene-acrylate resin 1	100	100	100		100
		Styrene-acrylate resin 2					
		Polyester resin				100	
	Colorant	Magnetite				105	
		Copper phthalocyanine type cyan pigment					
		Quinacridone magenta type pigment					
		Benzidine yellow type pigment					
		Carbon black	10	10	10		10
	Mold releasing agent	Low molecular weight polypropylene	4	4	4		4
		Low molecular weight polyethylene				4	
		Fatty acid amide wax					
	Charge controlling agent	Iron-azo complex		2.5		1	1
		Chromium salicylic acid complex	2				
		Zinc salicylic acid complex					
		Molybdenum quaternary ammonium complex			2		
External additive (Added amount to colored particle in parts by weight)	Silica	[2.5]	[2.5]			1	<u>25</u> [2.5]
	Positively chargeable silica			1			
	Titanium oxide	[0.5]	[0.5]				0.5

A marked-up version of the paragraph bridging pages 33 and 34 follows:

"To 1000 ml of the polymerizing liquid thus obtained, sodium hydroxide was added to adjust the pH to 9.5[,]. Then 270 ml of a 2.2 mole-% solution of potassium chloride and a solution composed of 67 ml of water dissolved therein 160 ml of isopropyl alcohol, 9.0 g of polyoxyethyleneoctylphenyl ether having an average polymerization degree of 10 were further added. Thus obtained reacting liquid was maintained at 75° C and stirred for 6 hours."

IN THE CLAIMS:

Please amend claims 1, 11, and 12 in "marked up" format, as follows:

1. (Twice Amended/Marked-up) A toner for developing an electrostatic image, comprising:

a resin binder; and [a colorant, wherein the toner contains an amount of]

not less than 0.1% by weight of an element selected from the group consisting of copper, chromium, iron, zinc, and molybdenum[, and];

wherein the toner has [the] an isolation ratio of the element [is] of not more than 10% by number, where the isolation ratio of the element is determined by particle emission analysis and defined as 100 times the number of particles exhibiting emission from the element but not exhibiting emission from carbon divided by the sum of the number of particles exhibiting emission from the element but not exhibiting emission from carbon and the number of particles exhibiting emission from the element and exhibiting emission from carbon.

11. (Amended/Marked-up) An image forming method comprises the steps of forming an electrostatic image on the surface of a photoreceptor, developing the electrostatic image by a developer to form a toner image, transferring the developed toner image to a recording medium, and fixing the toner image transferred on the recording medium, wherein the toner of claim [6 or 7] 1 is used.

12. (Amended/Marked-up) The toner of claim 1, wherein the isolation ratio of the element is not more than 2.5% by [weight] number.